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We claim:

- 1. A dietary composition comprising a mammal food base and a component comprising estrogen, androgen or a mixture thereof in an amount sufficient to reduce weight gain normally incurred in the mammal type subsequent to neutering, castration, spaying, ovariectomy or ovariohysterectomy, or post menopause, when the dietary composition is administered to a mammal on a regular basis.
- 2. A dietary composition according to claim 1, wherein the component comprises phytoestrogen, phytoandrogen or a mixture thereof.
- 3. A dietary composition according to claim 2, wherein the phytoestrogen comprises an isoflavone, lignan, coumestan, resorcylic acid lactone, or mixtures thereof.
- 4. A dietary composition according to claim 2, wherein the phytoestrogen or phytoandrogen is derived from soy bean or flax seed, or protein products thereof.
- 5. A dietary composition according to claim 1, wherein the estrogen or androgen is derived from fungal or microbial sources.
- A dietary composition according to claim 1, wherein the mammal food base comprises a food of animal origin, a cereal, a starch, other cellulosic material, or mixtures thereof.

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- 7. A dietary composition according to claim 1, comprising from about 0.001 to about 10 weight percent, based on the weight of the composition, of phytoestrogen, phytoandrogen, or a mixture thereof.
- 8. A dietary composition according to claim 1, wherein the phytoestrogen comprises daidzin, genistin, daidzein, genistein or coumesterol.
- 9. A method for reducing weight gain normally incurred in a mammal subsequent to neutering, castration, spaying, ovariectomy or ovariohysterectomy, or post menopause, comprising administering to the mammal on a regular basis a dietary composition comprising a mammal food base and a component comprising estrogen, androgen or a mixture thereof in an amount sufficient to reduce weight gain normally incurred in the mammal type subsequent to neutering, castration, spaying, ovariectomy or ovariohysterectomy, or post menopause, when the dietary composition is administered to the mammal on a regular basis.
- 10. A method according to claim 9, wherein the component comprises phytoestrogen, phytoandrogen or a mixture thereof.
- 11. A method according to claim 10, wherein the phytoestrogen comprises isoflavone, lignan, coumestan, resorcylic acid lactone, or mixtures thereof.
- 12. A method according to claim 10, wherein the phytoestrogen or phytoandrogen is derived from soy bean or flax seed, or protein products thereof.

- 13. A method according to claim 9, wherein the estrogen or androgen is derived from fungal or microbial sources.
- 14. A method according to claim 9, wherein the mammal food base comprises a food of animal origin, a cereal, a starch, other cellulosic material, or mixtures thereof.
- 15. A method according to claim 9, wherein the dietary composition is administered in an amount sufficient to provide estrogen, androgen or a mixture thereof to the mammal in an amount of from about 0.001 to about 100 mg per gram of total diet administered to the mammal.
- 16. A method according to claim 10, wherein the dietary composition is administered in an amount sufficient to provide phytoestrogen, phytoandrogen or a mixture thereof to the mammal in an amount of from about 0.001 to about 100 mg per gram of total diet administered to the mammal.
- 17. A method according to claim 9, wherein the dietary composition is administered in an amount sufficient to provide estrogen, androgen or a mixture thereof to the mammal in an amount of from about 1 to about 25,000 µg per gram of total diet administered to the mammal.
- 18. A method according to claim 10, wherein the dietary composition is administered in an amount sufficient to provide phytoestrogen, phytoandrogen or a

mixture thereof to the mammal in an amount of from about 1 to about 25,000 µg per gram of total diet administered to the mammal.

- 19. A method according to claim 9, wherein the dietary composition is administered in an amount sufficient to provide estrogen, androgen or a mixture thereof to the mammal in an amount of from about 60 to about 4000 µg per gram of total diet administered to the mammal.
- 20. A method according to claim 10, wherein the dietary composition is administered in an amount sufficient to provide phytoestrogen, phytoandrogen or a mixture thereof to the mammal in an amount of from about 60 to about 4000 µg per gram of total diet administered to the mammal.
- 21. A method according to claim 10, wherein the dietary composition is administered in an amount sufficient to provide phytoestrogen, phytoandrogen or a mixture thereof to the mammal in an amount of from about 0.001 to about 100 mg per kilogram of the mammal's bodyweight.
- 22. A method according to claim 10, wherein the dietary composition is administered in an amount sufficient to provide phytoestrogen, phytoandrogen or a mixture thereof to the mammal in an amount of from about 0.005 to about 50 mg per kilogram of the mammal's bodyweight.
  - 23. A method according to claim 9, wherein the mammal is a human.

- 24. A method according to claim 9, wherein the mammal is a dog or cat.
- 25. A method according to claim 9, wherein the mammal is a horse.
- 26. A method according to claim 10, wherein the phytoestrogen comprises daidzin, genistin or coumesterol.
- 27. A method according to claim 10, wherein the phytoestrogen comprises daidzein, genistein, or a mixture thereof.
- 28. A method according to claim 9, wherein the dietary composition is administered to the mammal on a daily basis.